

**EPA Superfund  
Record of Decision:**

**MARINE CORPS LOGISTICS BASE  
EPA ID: GA7170023694  
OU 05  
ALBANY, GA  
06/23/1995**

<IMG SRC 0495257>

INTERIM REMEDIAL ACTION  
OPERABLE UNIT 5  
POTENTIAL SOURCE OF CONTAMINATION 8  
RECORD OF DECISION

MARINE CORPS LOGISTICS BASE ALBANY  
ALBANY, GEORGIA

Unit Identification Code: M67004

Contract No. N62487-89-D-0317/089

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June 1995

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CERTIFICATION OF TECHNICAL  
DATA CONFORMITY (MAY 1987)

The Contractor, ABB Environmental Services, Inc.. hereby certifies that, to the best of its knowledge and belief, the technical data delivered herewith under Contract No. N62467-89-D-0817/089 are complete and accurate and comply with all requirements of this contract.

DATE: June 9, 1995

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## **EXECUTIVE SUMMARY**

### **DECLARATION FOR THE INTERIM REMEDIAL ACTION RECORD OF DECISION**

#### **SITE NAME AND ADDRESS**

Marine Corps Logistics Base  
Operable Unit 5, Potential Source of Contamination 8  
814 Radford Boulevard  
Albany, Georgia 31704-11128

#### **STATEMENT OF PURPOSE**

This Record of Decision (ROD) document presents the selected Interim Remedial Action (IRA) for Potential Source of Contamination (PSC) 8 of the Marine Corps Logistics Base (MCLB) Albany. It was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA), and to the extent practicable, the National Oil and Hazardous Substances Contingency Plan (NCP). This decision is based on the Administrative Record, which is on file in the Dougherty County Public Library, and the Environmental Branch Office, Facilities and Service Division, Building 5501, MCLB Albany, Georgia 31704.

The purpose of this IRA is to protect human health and the environment from potential threat while final remedial solutions are being developed. Both the U.S. Environmental Protection Agency (USEPA) Region IV and the State of Georgia have approved the selected IRA remedy.

#### **ASSESSMENT OF THE SITE**

A 1994 remedial investigation at PSC 8 revealed the presence of polychlorinated biphenyls (PCBs), elevated lead concentrations, and polynuclear aromatic hydrocarbons (PAHs) in soil within and around an apparent trench area. If actual or threatened releases of these substances from PSC 8 are not addressed by implementing the response action selected in this ROD, a current or potential threat to public health, welfare, or the environment may result.

#### **DESCRIPTION OF THE SELECTED REMEDY**

There are 26 PSCs at MCLB Albany. Of these, 14 PSCs were identified for the Remedial Investigation and Feasibility Study (RI/FS) process and were divided into 5 Operable Units. Operable Unit (OU) 5 consists of PSC 8 and PSC 14. PSC 8 addresses a former grit disposal area and PSC 14 is the former domestic wastewater treatment facility. The scope of this ROD is limited to contaminated soil in and around an apparent trench area at PSC 8.

The selected IRA for PSC 8 includes excavation of contaminated soil, transportation offsite to a federally-permitted landfill for disposal, and restoration of the excavation area.

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Marine Corps Logistics Base Albany,  
Albany, Georgia

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## GLOSSARY

ABB-ES	ABB Environmental Services, Inc.
ARAR	applicable or relevant and appropriate requirement
bls	below land surface
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CPC	chemical of potential concern
DOT	Department of Transportation
DWTP	domestic wastewater treatment plant
FFA	Federal Facility Agreement
ft#/day	square feet per day
GEPD	Georgia Environmental Protection Division
GHWMA	Georgia Hazardous Waste Management Act
IAS	Initial Assessment Study
in/yr	inches per year
IRA	Interim Remedial Action
IWTP	industrial wastewater treatment plant
MCLB	Marine Corps Logistics Base
Ig/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
NAAQS	National Ambient Air Quality Standards
NCP	National Oil and Hazardous Substances Contingency Plan
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NPL	National Priority List
O&M	operations and maintenance
OCGA	Official Code of Georgia, Annotated
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PAH	polynuclear aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PRE	preliminary risk evaluation
PSC	Potential Source of Contamination
RA	Risk Assessment
RCRA	Resource Conservation and Recovery Act
RFI	Resource Conservation and Recovery Act (RCRA) Facility Investigation
RI/FS	Remedial Investigation and Feasibility Study
ROD	Record of Decision

## **1.0 SITE NAME, LOCATION, AND DESCRIPTION**

Marine Corps Logistics Base (MCLB), Albany is an active facility occupying approximately 3,500 acres 5 miles east-southeast of Albany, Georgia. Land bordering MCLB Albany to the south, east, and northeast is primarily agricultural or recreational open space. The land bordering northwest and west of the Base is largely residential and commercial areas of eastern Albany.

Potential source of contamination (PSC) 8 is located in the southwestern part of the Base, adjacent to the Marine Corps Canal and the former domestic wastewater treatment plant (DWTP) (PSC 14). Figure 1-1 illustrates the location of MCLB Albany and the approximate location of OU 5 (comprising PSCs 8 and 14). PSC 8 measures approximately 350 feet by 120 feet and is the location of a former grit disposal area (Figure 1-2). The wastes disposed at PSC 8 were accumulated in the grit chamber of the adjacent DWTP.

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## **2.0 SITE HISTORY AND ENFORCEMENT ACTIVITIES**

MCLB Albany currently serves as a U.S. military logistics center. Its primary duties include controlling the acquisition, storage, maintenance, and distribution of combat and support material for the U.S. Marine Corps. The Base is also used for training military personnel and other tasks and functions as directed by the Commandant of the U.S. Marine Corps.

MCLB Albany has generated various types of solid and liquid wastes over the years, including hazardous wastes. The hazardous wastes include electroplating wastes containing heavy metals, organic solvents from stripping and cleaning operations, and waste fuel and oil.

In 1985, three investigations were performed to assess and characterize PSCs identified at MCLB Albany. These investigations included the 1985 Initial Assessment Study (IAS), the 1987 Confirmation Study, and the 1989 Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI). As a result of these investigations, MCLB Albany was placed in Group 7 (Hazard Ranking System score of 45.91 to 43.75) of the National Priority List (NPL) or uncontrolled hazardous waste sites. MCLB Albany was placed on the NPL in December 1989.

In July 1991, the Department of the Navy, representing MCLB Albany, entered into a Federal Facility Agreement (FFA) with the Georgia Environmental Protection Division (GEPD) and the U.S. Environmental Protection Agency (USEPA) Region IV to establish a procedural framework and schedule for developing, implementing, and monitoring appropriate response actions at the facility in accordance with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), RCRA, the National Oil and Hazardous Substance Contingency Plan (NCP), Superfund guidance and policy, and the Georgia Hazardous Waste Management Act (GHWMA).

The following reports describe the environmental investigations and plans for PSC 8 to date.

Southern Division Naval Facilities Engineering Command, (SOUTHNAVFACENGCOM), 1974, Multiple Use Natural Resources Management Plan for Marine Corps Supply Center, Albany, Georgia.

SOUTHNAVFACENGCOM, 1978, Master Plan, MCLB Atlantic, Albany, Georgia.

Crawford, V.I., 1979, Environmental Engineering Survey, Marine Corps Logistics Base (MCLB), Albany, Ga., prepared for SOUTHNAVFACENGCOM.

Envirodyne Engineers, Inc., 1985, Initial Assessment Study, Marine Corps



Logistics Basse, Albany, Georgia.

McClelland Engineers, 1987, Final Report, Confirmation Study Verification Step, Marine Corps Logistics Base, Albany, Georgia: prepared for SOUTHNAVFACENGCOM.

Applied Engineering and Science, Inc., 1989, RCRA Facility Investigation Phase One Confirmation Study, MCLB Albany, Georgia.

### **3.0 HIGHLIGHTS OF COMMUNITY PARTICIPATION**

The Proposed Plan for the IRA at OU 5 PSC 8, was made public April 28, 1995. This document was made available to the public in the Information Repository located at the Environmental Branch Office, Building 5501, MCLB Albany, Georgia 31704-1128. The public comment period for the IRA Proposed Plan extends from April 28 to June 12, 1995. The public notice of the proposed IRA was published in the Albany Herald and the Atlanta Constitution on April 25, 1995. In addition, a public meeting was held on May 4, 1995, at the Human Resources Office, Building 3010, MCLB Albany. At this meeting, representatives from SOUTHNAVFACENGCOM, MCLB Albany, and ABB-ES were available to answer questions about PSC 8 and the IRA under consideration. A Community Relations Responsiveness Summary is included in Appendix A.

The Proposed Plan identifies the preferred IRA at PSC 8 as Alternative No. 3. Alternative No. 3 is described as follows: excavation of the contaminated soil above action levels (approximately 60 cubic yards) from PSC 8 and disposal offbase at a Toxic Substances Control Act (TSCA) landfill. Confirmatory sampling of the walls and floor of the excavation area will be conducted to ensure all soil contaminated above action levels has been removed.

### **4.0 SCOPE AND ROLE OF THE INTERIM REMEDIAL ACTION (IRA) AT POTENTIAL SOURCE OF CONTAMINATION (PSC) 8**

The overall strategy for remediation of the MCLB Albany NPL sites is to group them into five OUs. Each OU is comprised of one or more PSCs. The IRA selected in this ROD applies to a trench area at PSC 8, one of two PSCs comprising OU 5. A remedial field investigation for OU 5 was performed in 1994 and a Remedial Investigation and Risk Assessment (RI/RA) report is currently being prepared.

OU5 is located in the southwestern part of the Base. This proposed IRA is limited to contaminate soil in the vicinity of the trench area within PSC 8.

The overall strategies of the selected IRA for PSC 8 are to minimize potential exposure of humans and the environment to contaminated soil, and to control the potential release of hazardous substances to water bodies.

The IRA selected in this ROD will be included in the final action for OU 5 and will be consistent with any planned future actions to the extent possible.

### **5.0 SUMMARY OF SITE CHARACTERISTICS**

5.1 GEOLOGY. MCLB Albany is located in the Dougherty Plain district, which is part of the Coastal Plain physiographic province. The Albany regional geology is characterized by layers of sand, clay, sandstone, dolomite, and limestone that dip gently and progressively thicken to the southeast. The sediments extend to a depth of at least 5,000 feet below land surface (bls).

The sediments of interest at MCLB Albany (sediments that affect the hydrology of the Upper Floridan aquifer) are of late middle Eocene age and younger including, in descending order, the undifferentiated overburden of Quaternary age, the Suwannee Limestone, the Ocala Limestone the Clinchfield Sand, and the Lisbon Formation. A geologic section and section location map of the Albany area are presented on Figures 5-1 and 5-2, respectively.

5.2 HYDROGEOLOGY. There are two principal hydrostratigraphic units of interest at MCLB, Albany: (1) the undifferentiated Quaternary overburden deposits and (2) the underlying Upper Floridan aquifer (Ocala Limestone).

Within the overburden, most sand or clay layers are discontinuous; however, a thick clay zone apparently persists in the lower half of the overburden throughout the MCLB Albany area. This clay zone, ranging in thickness from 10 to 29 feet, serves to cause intermittent perched groundwater conditions in the overburden. Also, it decreases the amount of groundwater recharge to the Upper Floridan aquifer from infiltration of precipitation, and controls the rate of infiltration of chemical contaminants. Maximum annual water-level fluctuations may range from 10 to 15 feet, based on observed differences in water levels measured at different times of the year between 1991 and 1995. Water levels in area wells are highest during February through April and at minimum during November through January (when the overburden wells are commonly void of water). Hydraulic properties of the overburden are controlled primarily by the amount of sand and clay present.

The Upper Floridan aquifer, consisting primary of the Ocala Limestone, ranges from about 200 to 275 feet thick in the area of MCLB. The aquifer is confined above by the clayey overburden and below by a low permeability layer in the Lisbon Formation. Large quantities of water are stored and transmitted within the aquifer. The Upper Floridan has recently been studied and judged to be favorable for large-scale water withdrawal (Torak and others, 1991). The aquifer is regionally unconfined, semiconfined, or confined by the overlying soil, and the rate of recharge depends primarily on the vertical hydraulic conductivity of the overburden. The rate of mean annual recharge to the aquifer is reported (Torak and others, 1991) to be on the order of 6 to 14 inches per year (in/yr). The Upper Floridan aquifer is divided into an upper zone (with greater density) and a lower zone (with greater permeability due to solution-enlarged joints, bedding planes, and fractures). These solution cavities can produce transmissivity values as high as 178,000 square feet per day (ft<sup>2</sup>/day) (see ABB-ES RI/FS wordplay, OU5, for further information and Torak and others, 1991).

Published studies (Hicks and others, 1987) of the Upper Floridan aquifer indicate that the potentiometric surface slopes westerly to southwesterly in the MCLB Albany area (Figure 5-3). The aquifer discharges water to the Flint river and local streams where the streams have incised into the aquifer or where the potentiometric surface exceeds the surface water elevation. The relationship can be reversed locally during dry periods when the potentiometric surface drops and streams discharge to the aquifer.

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5.3 ECOLOGY. The majority of forested land in the vicinity of the Base is vegetated with longleaf pine flatwoods, the most extensive floral community in the southern coastal plain. Also known as pine flatwoods, pine flats, low pinelands, or pine barrens, this low flat woodland habitat occurs transitionally between upslope xeric sandhill communities and downslope shrub-dominated evergreen wetlands. Pine flatwoods grow in Florida, Georgia, South Carolina, and North Carolina.

The high level of herbaceous productivity in the pine flatwood habitat frequently supports a rich invertebrate faunal community. This invertebrate community often supports a number of

insectivorous vertebrates, including 20 to 30 species of reptiles and amphibians. A number of small mammals inhabit the flatwood community although no mammal is exclusive to this habitat.

Depending on the vegetative association, pine flatwoods provide habitat for a diverse array of avifauna, including insectivorous gleaners of pine needles and bark, flycatchers, a seed eating assemblage, and nocturnal and diurnal aerial predators. The red-cockaded woodpecker (*Picoides borealis*), a federally endangered species, occurs almost exclusively within this pine flatwoods habitat; however, there are no known records of this species at MCLB Albany.

The presence of two rare and threatened species has been confirmed at the Base. The American alligator (*Alligator mississippiensis*), now classified as threatened, has been documented in wetland habitats at the Base; this semi-aquatic species is ubiquitous throughout the southeast. Bachman's sparrow (*Aimophila aestivalis*), a State and federally listed "rare" species, is also a possible resident of the dry open pine forests at MCLB Albany; this large, secretive sparrow is a year-round resident of southern Georgia.

**5.4 NATURE AND EXTENT OF CONTAMINANTS.** The nature, extent, and concentration of hazardous substance contamination at PSC 8 was studied during a remedial field investigation performed from March through April 1994. In fall 1994, a preliminary risk evaluation (PRE) was conducted on analytical data collected during this investigation. Concurrent with the PRE, a supplemental field investigation at PSC 8 was conducted to characterize or define "clean" boundaries of contaminated soil in the vicinity of the trench. The following summarizes the major observations from the 1994 investigations.

**5.4.1 Chemicals of Potential Concern (CPCs)** To provide a focus for IRA objectives, CPCs at PSC 8 were identified in the OU 5 PRE. The following factors were considered in the selection of CPCs:

- concentration and frequency of detection:
- physical, chemical and toxicological characteristics:
- comparison of detected values to background; and
- regulatory criteria and toxicity.

Table 5-1 lists hazardous substances detected in trench area soil at PSC 8.

## **6.0 SUMMARY OF SITE RISKS**

As part of the RI decision-making process, a PRE was conducted in late 1994 for OU 5 that included a preliminary human health and ecological evaluation. Data collected during the RI were used to evaluate the presence of contamination, the potential pathways of contaminant migration, and potential risks to human and ecological receptors. The PRE did not include samples collected and analyzed during the concurrent supplemental investigation.

Ecological receptors in the vicinity of the individual study areas that could potentially be exposed to contaminated environmental media were identified. Major site-specific exposure pathways were evaluated, and possible signs and symptoms of stress on biological receptors at OU 5 were considered. Particular emphasis was placed on identifying sensitive ecological receptors and assessing the potential occurrence of rare, threatened, or endangered species at the Base.

As mentioned in Section 5.4.2, regular disposal of grit from the DWTP apparently accumulated concentrations of Aroclor-1260 and lead in the trench area at PSC 8. Other artifacts from the grit chamber most likely were included in the deposit of the grit; however, the draft PRE determined that concentrations of the PCB (Aroclor-1260) and lead are the only CPCs.

A supplemental field investigation of the trench area at PSC 8 was conducted in November 1994. The purpose of the supplemental investigation was to delineate the lateral extent of apparent contamination in surficial soil of the trench area (to define "clean" boundaries). The supplemental investigation confirmed the presence of Aroclor-1260 in the vicinity of the trench area. Polynuclear aromatic hydrocarbons (PAHs) were also detected with the highest concentration of total PAHs equaling 40,590 Ig/kg. The highest concentration of lead was 168 milligrams per kilogram (mg/kg) in a surface soil sample collected adjacent to the trench.

As mentioned above, the PRE identified PCBs and lead as CPCs. The supplemental investigation identified PAHs at an order of magnitude higher than the original remedial field investigation. Therefore, analytical action (clean-up) levels were established for PCBs, lead, and PAHs. The action levels as described in the Focused Feasibility Study report (ABB-ES, 1995) for the PSC 8 IRA are: (1) total PCBs, 1 mg/kg; (2) lead, 100 mg/kg; and (3) total PAHs, 10 mg/kg. The soil action level for lead has been reduced to 75 mg/kg.

## 7.0 DESCRIPTION OF ALTERNATIVES

The IRA alternatives were developed based on a review of remedial actions and IRAs with similar contaminants, a review of regulatory requirements, and a review of literature to identify treatment technologies capable of treating soil contaminated by PCBs, PAHs, and lead. Three conventional techniques were evaluated as alternatives to remediate PSC 8 trench area soil: (1) containment, (2) collection combined with off-base treatment and disposal, and (3) collection combined with off-base disposal.

The following is a description of the alternatives evaluated for PSC 8 and associated costs.

7.1 ALTERNATIVE NO. 1, MULTI-LAYER CAP. This alternative incorporates the construction of a clayey-sand layer; a flexible, impermeable membrane liner; and a layer of clean sand above the surface of the contaminated areas. The surface layer consists of a concrete slab. In addition, concrete walls would be constructed to house the slab. The surficial capping of PSC 8 would reduce the infiltration of surface water, minimize potential migration of the contaminants, and prevent exposure to burrowing mammals. Land use restrictions and ongoing operations and maintenance (O&M) would also be implemented. O&M would require regular inspection of the concrete and any necessary repairs.

Estimated capital costs:	\$ 19,550
Estimated present worth O&M costs:	\$ 9,220
Estimated present worth costs:	\$ 28,770
Estimated implementation time frame:	6 weeks

7.2 ALTERNATIVE NO. 2 EXCAVATION, INCINERATION, AND DISPOSAL. This alternative involves excavation of the soil contaminated above action levels at PSC 8 and the transportation of this soil (approximately 60 cubic yards) to an off-base TSCA permitted incinerator for treatment followed by disposal of the residual ash at an RCRA facility. The incineration of the soil would potentially destroy up to 99.9 percent of the organic contaminants.

Confirmatory sampling of the walls and floor of the excavation area would be conducted to ensure complete removal of soil that has been contaminated above action levels. Restoration of trench area would follow excavation when action levels are met.

Estimated capital costs:	\$ 212,990
Estimated present worth O&M costs:	\$ 0
Estimated present worth costs:	\$ 212,990
Estimated implementation time frame:	2 weeks

7.3 ALTERNATIVE NO. 3. EXCAVATION AND DISPOSAL AT TSCA LANDFILL. This alternative requires excavation of the soil contaminated above action levels from PSC 8 and its disposal at an off-base TSCA or RCRA landfill. The type of landfill would be determined by PCB Concentrations. Confirmatory sampling of the walls and floors of the excavation area would be conducted to ensure complete removal.

## **8.0 SUMMARY OF COMPARATIVE ANALYSIS OF ALTERNATIVES**

The following is an evaluation of the alternative considered for the IRA at PSC 8.

### **8.1 OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT.**

Alternatives No. 2 and 3 provide the greatest protection for the public health and environment at PSC 8. These alternatives eliminate the existing and potential future exposure pathways for the public and the environment.

Alternative No. 1 provides protection for the public and environment through the in-place contaminated soil. This would be effective for eliminating the existing exposure pathways provided there is on-going security and maintenance at PSC 8. Alternative No. 4 (no action) provides no protection to human health or the environment.

### **8.2 COMPLIANCE WITH APPLICABLE AND APPROPRIATE REQUIREMENTS (ARARs)**

The first three IRA alternatives will achieve compliance with the location-specific and action-specific ARARs and guidance criteria. Air quality regulatory compliance must be ensured, and required engineering controls must be implemented during the excavation, transportation, or regrading of the soil. Alternative No. 4 would not achieve compliance with chemical-specific ARARs.

3.3 LONG-TERM EFFECTIVENESS AND PERMANENCE. Alternative No. 2 provides the greatest degree of long-term effectiveness and permanence because it permanently destroys the PCBs and PAHs detected in the soil. Alternatives No. 1 and 3 rely strictly on the in-place containment or direct burial of the contaminated soil at a landfill. Alternative No. 1 has a design life expectancy of approximately 30 years. PCBs, PAHs, and lead are relatively stable compounds. Therefore, a re-evaluation of the cap's structural integrity would be necessary after 30 years.

There is a potential risk associated with uncontrolled exposure to the CPCs at PSC 8. Therefore, the no action alternative would not protect potential receptors in the future.

8.4 REDUCTION OF TOXICITY, MOBILITY, AND VOLUME THROUGH TREATMENT. Alternative No. 2 destroys the PCBs and PAHs at PSC 8 through thermal treatment, thereby reducing the toxicity and mobility of the contaminants. Lead, however, is unaffected by the thermal treatment.

The first three alternatives will reduce the mobility of the contaminants through containment either onsite or at an approved facility. None of the remedial alternatives will eliminate or reduce the lead concentration of PSC 8 soil. Alternative No. 4 would not provide any reduction in toxicity, mobility, and volume through treatment.

## **9.0 SELECTED REMEDY**

Based on the comparative analyses of alternatives, the recommended IRA alternative is Alternative No. 3, excavation and disposal at a TSCA or RCRA-permitted landfill. Both Alternative No. 2, excavation and incineration, and Alternative No. 3 meet the IRA objectives, including the ability to meet the proposed target clean-up levels and compliance with identified

ARARs. The first three alternatives require conventional technology, with the necessary equipment readily available. The differentiating factor that makes Alternative No. 3 more attractive than No. 2 is cost. Alternatives No. 1 and 4 would not meet the clean-up objectives, and therefore would not be protective of human health and environment should land use at PSC 8 change. Also, Alternative No. 1 would require a structural re-evaluation after 30 years.

9.1 REMEDIAL GOALS. The specific objectives of the selected IRA are to: (1) minimize the potential for direct human and ecological exposure to hazardous materials, and (2) control the potential for releases of hazardous substances to the surface water and groundwater at PSC 8.

This is an interim action that addresses a part of OU5. Other media at PSC 8. are being investigated concurrently with PSC 14 as part of an overall OU5 evaluation. The actions described in this ROD are intended to be an IRA for the trench area soil in PSC 8 only. Any remaining contamination at PSC 8 will be evaluated (by sampling) as part of remedial actions to comply with the Base permit under the Georgia Hazardous Waste Management Act (GHWMA).

This IRA will be monitored carefully to ensure removal of contaminants above action levels. Once the IRA and RI/FS process is complete, a final ROD will be prepared for OU 5.

## 10.0 STATUTORY DETERMINATIONS

Under its legal authorities, USEPA's primary responsibility at Superfund sites is to conduct remedial actions that achieve adequate protection of human health and the environment. Section 121 of CERCLA establishes several other statutory requirements and preferences. These specify that when complete, the selected remedial action for a site must comply with applicable or relevant and appropriate environmental standards established under federal and state environmental laws unless a statutory waiver is justified. The selected remedy also must be cost effective and use permanent solutions, alternative treatment technologies, or resource recovery technologies to the maximum extent practicable. Finally, the statute includes a preference for remedies that employ treatments that permanently and significantly reduce the volume, toxicity, or mobility of hazardous wastes as their principal element. The following sections discuss how the selected remedy meets these statutory requirements.

10.1 PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT. The selected IRA for PSC 8, excavation and off-base disposal at a TSCA facility, will protect human health and environment from potentially adverse exposure risks associated with the current use of the PSC.

10.2 COMPLIANCE WITH APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARs). The selected IRA for PSC 8 will comply with ARARs. The following were identified as ARARs for OU 5, PSC 8.

Clean Air Act (CAA), National ambient Air Quality Standards (NAAQS), and National Emissions Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 50 and 40 CFR 61

USEPA regulations on Approval and Promulgation of Implementation Plans, 40 CFR Part 52 (Subpart L-Georgia).

Occupational Safety and Health Act (OSHA) regulations for air contaminants, 29 CFR 1910.1000.

RCRA General and Location Standards for Permitted Hazardous Waste Facilities, 40 CFR 264 (Subparts A through F).

USEPA Rules for Controlling PCBs under the Toxic Substances Control Act

(TSCA), 40 CFR 761.125 (Subpart D, G, and K).

Georgia Hazardous Waste Management Act, Official Code of Georgia, Annotated (OCGA) Section 12-8-60 et seq and Rules, Section 391-3-11.

Georgia Air Quality Act of 1978. OCGA Section 12-9-1 et seq. and Section 391-3-1.

Endangered Species Act, 16 USC 1531, 50 CFR Parts 81, 225, and 402.

Resource Conservation and Recovery Act Facility Location Regulations, 40 CFR Part 264.18.

The IRA for PSC 8 will meet the health-based ARARs through removal of the contaminants to the action levels established.

10.3 COST EFFECTIVENESS. The selected IRA for OU 5, PSC 8, has been determined to provide overall effectiveness proportional to its cost. The selected IRA for PSC is protective of public health and the environment and is less expensive than Alternative No. 2, excavation, incineration, and off-base disposal.

10.4 UTILIZATION OF PERMANENT SOLUTIONS AND ALTERNATIVE TREATMENT TECHNOLOGIES (OR RESOURCE RECOVERY TECHNOLOGIES) TO THE MAXIMUM EXTENT PRACTICABLE. It has been determined that the selected IRA for PSC 8 represents the maximum extent to which treatment technologies can be used in a cost-effective manner. The selected IRA provides the best balance of tradeoffs in terms of reduction in toxicity, mobility, or volume achieved through treatment, short-term effectiveness, implementability, and cost, while also considering the statutory preference for treatment as a principle element and considering state and community acceptance.

Based on the design criteria used for the IRA, the selected alternative can be incorporated into a final full-scale remedial action at OU 5.

10.5 PREFERENCE FOR TREATMENT AS A PRINCIPAL ELEMENT. Although the remedial action for PSC 8 is an IRA, the statutory preference for remedies that employ treatment as the principal element will be satisfied for OU 5 in a final decision document.

10.6 DOCUMENTATION OF SIGNIFICANT CHANGES. No significant changes from the Proposed Plan were made.

#### **REFERENCES**

- GEPD, 1995, Guidance on Soil Concentrations for Type 1 and Type 3 Risk Reduction Standards, Georgia Department of Natural Resources, Rules for Hazardous Site Response, Section 391-19-07, March.
- Hicks, D.W., Gill, H.E., and Longworth, S.A., 1987, Hydrogeology, Chemical Quality, and Availability of Groundwater in the Upper Floridan Aquifer, Albany Area, Georgia: U.S. Geological Survey Water-Resources Investigations Report 87-41145, 52 p.
- Torak, L.J., Davis, G.S., Strain, G.A., and Herndon, J.G., 1991, Geohydrology and Evaluation of Water-Resource Potential of the Upper Floridan Aquifer in the Albany Area, Southwestern Georgia: U.S. Geological Survey Open-File Report 91-52, 86 p.



## **APPENDIX A**

### **COMMUNITY RELATIONS RESPONSIVENESS SUMMARY**

#### **1.0 OVERVIEW**

MCLB Albany along with SOUTHNAVFACENGCOM held a public meeting on May, 1995, at MCLB Albany to discuss the Proposed Plan for the IRA for PSC 8 and solicit comments and question from the public. However, no citizens attended. Accordingly, no questions or comments were received during the public meeting. In addition, no written comments or questions were received from the public.

#### **2.0 BACKGROUND ON COMMUNITY INVOLVEMENT**

An active community relations program providing information and soliciting input has been conducted by MCLB Albany for OU 5, PSC 8. Interviews of citizens on Base and in Albany were conducted in the spring of 1990 to identify community concerns. No significant concerns that required focused response were identified. Most comments received were concerning the potential for contamination of water resources. However, those interviewed indicated that they place great trust in MCLB Albany and their efforts to rectify past waste disposal practices. In addition, the Base has formed a Technical Review Committee that includes members representing the City of Albany and Dougherty County. The local media has also been kept informed since MCLB Albany was placed on the NPL. Installation Restoration (IR) Program fact sheets have been prepared and made available at the Public Affairs Office at MCLB Albany. Documents concerning OU 5, PSC 8 are located in the Information Repository at Dougherty County Public Library, and the Administrative Record at the Base Environmental Branch office.

#### **3.0 SUMMARY OF PUBLIC COMMENT AND AGENCY RESPONSE**

##### **3.1 PUBLIC MEETING**

No comments or questions were received during the Public Meeting held on May 4, 1995.

##### **3.2 PUBLIC COMMENT PERIOD**

Comments and questions received during the public comment period from April 28 to June 12, 1995 are summarized below.

###### **3.2.1 Technical Comments and Questions**

No technical comments and questions wee received during the public comment period.

###### **3.2.2 Other Comments and Questions**

No other comments and questions were received during the public comment period.

RESPONSE TO COMMENTS

PSC 8 Interim Remedial Action Record of Decision  
Marine Corps Logistics Base Albany  
Albany, Georgia

Comment No.	Page/Para.	Comment	Response
Comments from Georgia Department of Natural Resources			
1	Section 10.2	References to the Georgia Code are inconsistent throughout the list of ARARs. The first citation of Georgia law should be to the Official Code of Georgia Annotated (OCGA). The abbreviation OCGA may be used thereafter.	The references to the Georgia Code in Section 10.2 have been revised as requested.
2	Section 10.2	The list of ARARs cites the Georgia Hazardous Waste Management Act and Rules twice. These citations appear on page 10-2 (Georgia Hazardous Waste Management Act, Official Code of Georgia [Annotated] (OCGA) Section 12-8-60 et. seq. and Rules, Chapter 391-3-11). The Georgia Hazardous Waste Management Act is also cited on page 10-3 (Georgia Hazardous Waste Management Act, Code of Georgia, Title 12, Chapter 8, Article 3). The citation on page 10-3, in addition to being redundant, also includes the Georgia Hazardous Site Response Act, which has not been identified as an ARAR for the site. The citation of page 10-3 should be deleted. The Rules for Hazardous Waste Management are cited a second time on page 10-4. This citation should be deleted.	The second reference to the GHWMA has been deleted from page 10-3. The reference to the Georgia Hazardous Site Response Act was listed as an ARAR because MCLB Albany is listed as #10094 on the Hazardous Site Inventory, Hazardous Site Response Rules 391-319.05. The second reference to the Hazardous Waste Management Rules has been deleted from Page 10-4.
Comments from U.S. EPA			
1	Page 8-2	The first sentence should read as follows: "There is potential risk associated with uncontrolled exposure to the CPCs at PSC 8."	The text has been revised as requested.
2	Page 10-5 Section 10.6	Replace the section with the following sentence: "No significant changes from the Proposed Plan were made."	Section 10.6 has been replaced as requested.